HARKSOUND®

HS 510

Semi-Automatic
Direct Drive Turntable

Service Manual

PARTS LIST, EXPLODED VIEW, DIAGRAMS

CEC International Inc.

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PARTS LIST

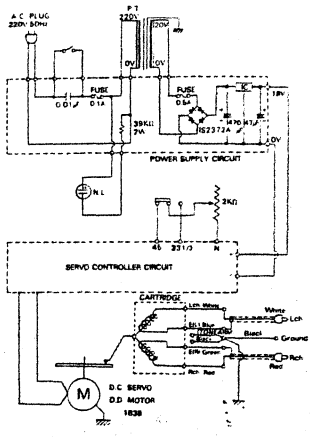
Model	Destination	Voltage/Frequency
E-0	Europe	220V 50Hz
E-M	General territory	117/220V 50/60Hz
E-2	Australia	240V 50Hz
E-3-3	Canada	120V 60Hz

Ref. No.	Parts No.	Description	Model
1	CA 20645	Subchassis	
2	CD 20664	Drive gear	
3	CD 44709	Ratchet BL	
4	CA 44708	Ratchet A	
5	CB 41801	Ratchet collar	
6	CD 45709	Drive gear pin	
7	CD 46080	Guide plate	
8	CB 45597	Drive gear shaft (B)	
9	CD 45629	Gear stopper	
10	CB 45594	Gear stopper shaft (B)	
11	CE 45843-2	Spring	
12	C 30870s	Return plate assembly	
13	CA 45844	Guide plate	
14	CB 45549	Return plate shaft	
15	CB 45550	Spacer shaft	
16	CE 41827	Return plate spring	
17	CD 46064	Switch base	
18	C 45649s	Tonearm fixing plate assembly	
19	CE 43917	Lifting spring	
20	C 45655s	Neon hood assembly	
21	CD 44866	Sleeve	
22	CA 45642	Sleeve mounting plate	
23	CA 46175	Return arm stopper	
24	CB 46230	Return arm shaft	
25	CD 30747	Return arm	
26	CE 46097	Reject spring	
27	CE 46084	Reject lever spring	
28	CD 43972	Reject spring spacer	
29	CF 30778	Tonearm assembly	
29-1		Tonearm	
29-2	C 46040s	Headshell	
29-3		Counterweight	
29-4		Subweight	
30	CF 45955-1	Cartridge MC20	E-0
30	C 46178s	Cartridge MC20E	E-M
30	CF 46185	Cartridge Ortofon FF 150 MkII	E-2
31	CB 43212-0	Cartridge mounting screw	E-0, E-M, E-3-3
31	CB 43212-5	Cartridge mounting screw	E-2
31	CB 43212-2,-7	Cartridge mounting screws	E-3-3
32	CD 43214	Cartridge mounting washer	
33	CB 43213	Cartridge monting nut M 2.6	
34	CD 20654	Tonearm base	
35	CD 45523-4	Antiskating knob	
36	CD 45784	Antiskating cam	
37	CD 45341	Antiskating lever	
38	CE 45422-1	Antiskating spring	
39	CA 45522	Friction plate	
40	CK 44942	Friction pad	
41	CK 46073	Felt washer	
42	C 30738s	Cueing lever assembly	
43	CD 45775	Cueing lever knob	
44	CD 45348	Cueing cam	
45	CD 45342	Tonearm support	
46	CD 41936	Lift cap	
47	CB 45424	Lift bar	
48	CB 45425	Adjusting screw	
49	CE 45963	Spring	
50	CD 45358	Thrust	
51	CD 45343	Rest arm	
52	C 46007s	Tonearm rest assembly	
53	CD 10030-1	Cabinet	
54	CD 10027-2	Bottom base	
55	CK 46129	Felt leg	
56	CD 20641-1	Dust cover	
57	CD 44205	Dust cover cushion	
58	CD 20663-1	Control plate	
59	CD 30788-2	Control plate badge	E-0
59	CD 30788-3	Control plate badge	E-M, E-2, E-3-3
60	CD 45888	Pitch control knob	
61	CD 45821	Button cover	
62	CD 45820-1	Operating knob (A)	
63	CD 45820-2	Operating knob (A)	
64	CD 45824-2	Operating knob (B)	
65	CD 45870	Spacer (A)	
66	CD 45872	Spacer (C)	
67	CA 30734	Switch mounting plate	
68	CB 45527	Guide shaft B	
69	C 45658s	Reject lever assembly	
70	C 45653s	Button lever assembly	
71	CE 45927	Spring	
72	CE 45587	Float spring (A)	
73	CE 45849	Float spring (B)	
74	CD 44937	Spring mounting	
75	CD 42438	Moltprene	
76	CK 30772	Hinge	
77	CD 20633-1	Turntable platter	E-0
77	CD 20633	Turntable platter	E-M, E-2, E-3-3
78	CD 20669	Turntable platter mat	
79	CH 46158	Blind seal	
80	CA 44996	Shielded cord clamping	
81	CA 45582	Cord mounting plate	
82	CD 44421	Strain releaf	E-0, E-M
82	CD 44573	Strain releaf	E-2
82	CD 43768	Strain releaf	E-3-3
83	CF 20649	Motor assembly	
84	CF 30698	Power transformer	E-0, E-2
84	CF 30700	Power transformer	E-M
84	CF 30701	Power transformer	E-3-3
85	CA 45580	Transformer mounting plate	
86	CD 44289-1	Motor cushion rubber	
87	CR 45586	Special screw	
88	C 45873s	Power printed circuit board assembly	E-0
88	C 46083s	Power printed circuit board assembly	E-M
88	C 46177s	Power printed circuit board assembly	E-2
88	C 46176s	Power printed circuit board assembly	E-3-3
89	CF 30684	Printed circuit board	
90	CF 42734	Condenser	E-0, E-M, E-2
90	CF 43838	Condenser	E-3-3
91		Exidized metalic resistor 39 Kohm/2W	E-0, E-2
91		Exidized metalic resistor 12 Kohm/1W	E-M, E-3-3
92	CF 44795	Silicon bridge diode	
93		Electrolytic condenser 470 μF/25V	
94		I.C. (optional use) NJM78M18 μPC14318H LM340T-18 μA78M18	
95		Electrolytic condenser 47μF/25V	
96	CA 45585	Radiation plate	
97	CF 30618-2	Fuse 100 mA primary	E-0, E-2
97	CF 46102	Fuse 160 mA primary	E-M
97	CF 46151	Fuse 200 mA primary	E-3-3
98	CF 30619	Fuse 500 mA secondary	E-0
99	CF 43965-6	Neon lamp	
100	CF 43233	Microswitch	E-0, E-M, E-2
100	CF 30217	Microswitch	E-3-3
101	CF 45863	Speed change switch	
102	CF 30527	Slide type variable resistor 2K ohm	
103	CK 45833	Masking sheet A	
104	CF 45603	Shielded PCB	
105	CA 45583	Shielded cover(A)	
106	CF 30490	PCB fixing spacer	
107	CF 44074-2	Braided wires	
108	CD 45269	Cable tie	
109	CD 42667	Metalic clamping	
110	CF 46081	Mini-clamping	
111	CD 43307	Nylon clamping 3N	E-0, E-M, E-3-3
111	CD 43151	Cord stopper 4N	E-2
112	CD 44655	Cord stopper 5N	E-0, E-M, E-3-3
112	CD 44702	Cord stopper 6N	E-2
113	CD 41833	Switch cover	
114	CF 42680	6P slide switch	E-M
115	CH 44336	Blind	E-0, E-2, E-3-3
116	CA 42681	Switch mounting	E-M
117	CB 45604-1	Motor stud	
118	CH 44915	Voltage switch label	E-M
119	CF 30332	AC power supply cord	E-0, E-M
119	CF 30324	AC power supply cord	E-2
119	CF 45932	AC power supply cord	E-3-3
120	CF 46096	Output shielded cord	E-0, E-M, E-3-3
120	CF 30676-1	Output shielded cord	E-2
121	CK 45949	Dust cover logo	
122	CH 46024	Rating label	E-0
122	CH 46021	Rating label	E-M
122	CH 46077	Rating label	E-2
122	CH 46155	Rating label	E-3-3
123	CH 45892-1	Clamp caution label	
124	CH 44312	Serial number label	
125	CH 44399-1	Variable resistor label	
126	CH 44969-1	Stylus label	E-0
126	CH 44969-5	Stylus label	E-M
127	CH 46401	Stylus position gauge	
128	CD 30417	Parts box	
129	CH 44216	Parts box cover	
130	CD 43100	45 rpm adapter	
131	CK 44861-1	Oil tube	
132	CD 44217	Screwdriver	
133	C 45012	Adapter mounting assembly	
Other parts			
	CH 43548	Fuse label primary	E-0, E-2
	CH 46103	Fuse label primary	E-M
	CH 45002	Fuse label primary	E-3-3
	CH 44485	Fuse label secondary	E-0
	CD 46256	Return arm support	
	CH 44910	Voltage label 220—240V	E-M
	CH 44911	Voltage label 110—120V	E-M
	CH 45606-4	Carton box	E-0
	CH 45606-7	Carton box	E-M, E-2, E-3-3
	CD 20665	Styrol pad right side	
	CD 20667	Styrol pad left side	
	CH 45608	Polyethylene bag for unit	
	CH 40112	Polyethylene bag for turntable platter	
	CH 44221	Polyethylene bag for dust cover	
	CH 45609	Polyethylene bag for carton box	
	CH 45972	Polyethylene bag for owner's manual	
	CD 45321	Curl stopper	
	CD 45051	Rubber ring	
		Owner's manual	

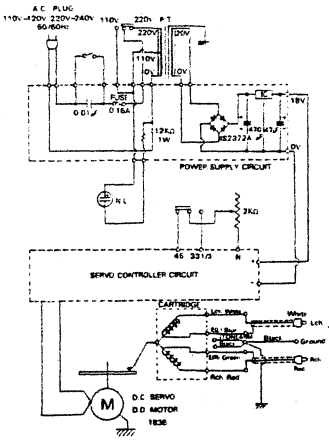
DIAGRAMS

Circuit Diagram

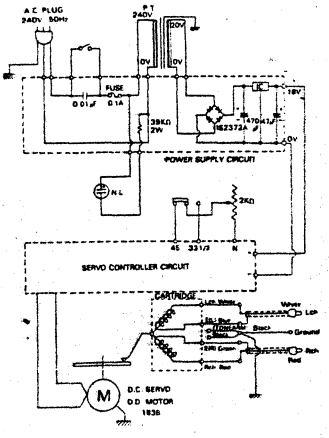
Model E-0



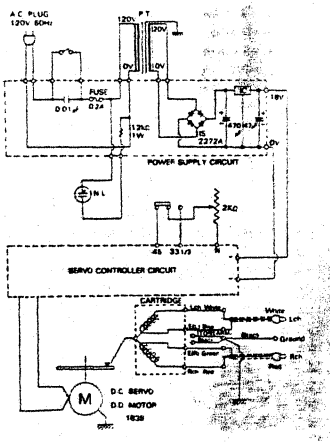
Model E-M



Model E-2

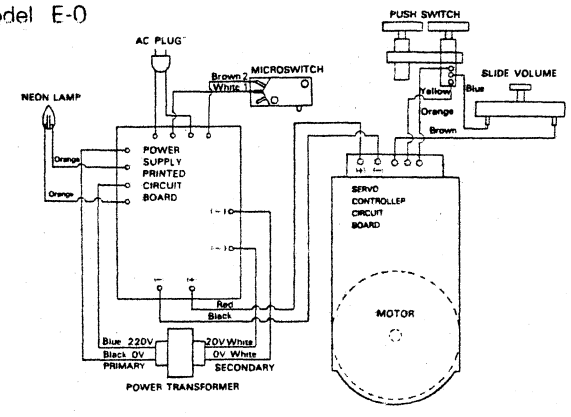


Model E-3-3

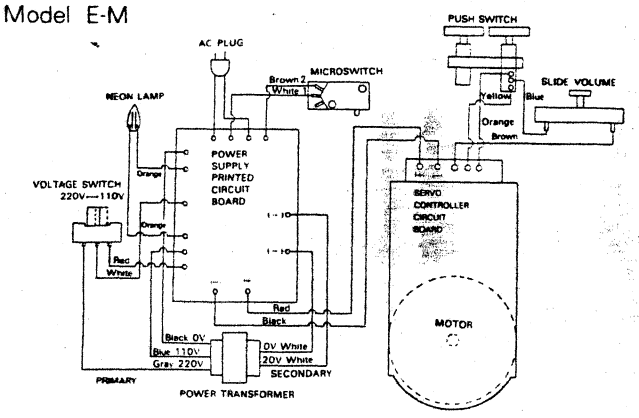


Wiring Diagram

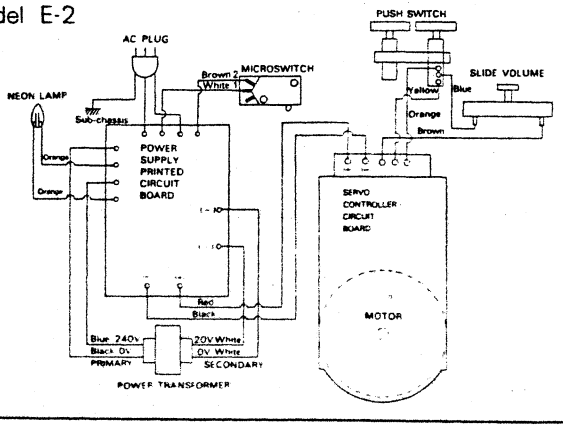
Model E-0



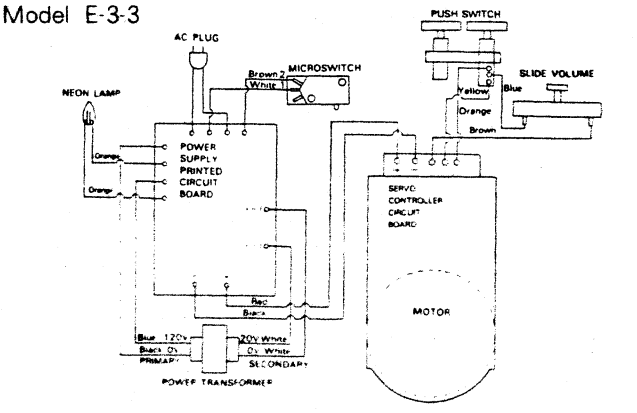
Model E-M



Model E-2



Model E-3-3

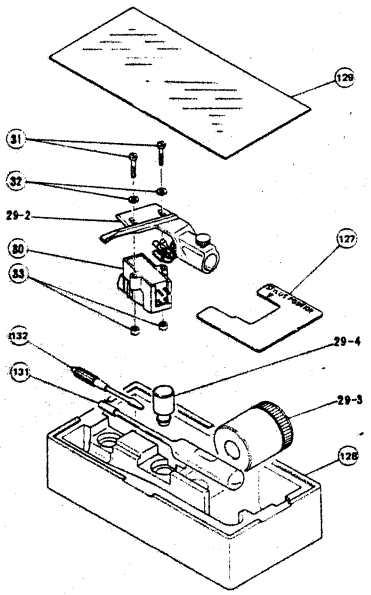


SCREWS, WASHERS AND NUTS

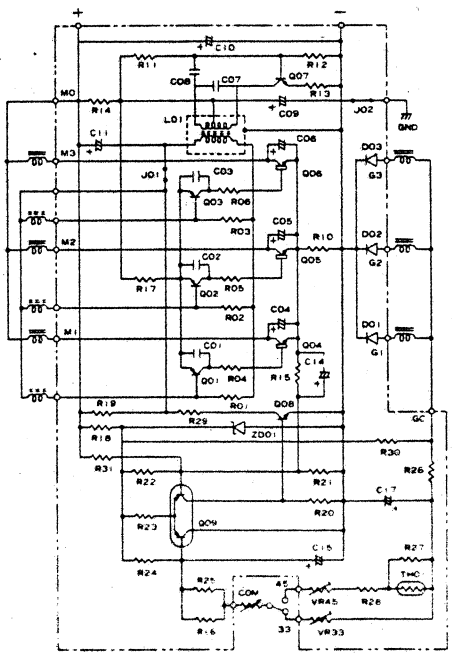
Ref. No.	Description
201	⊕ Pan head screw (Bronze) M3 x 12
202	⊕ Pan head screw M3 x 25
203	⊕⊖ Pan head screw (Red) M4 x 20
204	⊕ Flat head screw (Bronze) M3 x 10
205	⊕ Pan head tapping screw (class 2) (Bronze) 2.6φ x 6
206	⊕ Pan head tapping screw (class 2) 3φ x 6
207	⊕ Pan head tapping screw (class 2) 3φ x 10
208	⊕ Pan head tapping screw (class 2) 3φ x 18
209	⊕ Pan head tapping screw (class 2) 3.5φ x 6
210	⊕ Pan head tapping screw (class 1) (Bronze) 3φ x 12
211	⊕ Flat head tapping screw (class 2) (Bronze) 3φ x 8
212	⊕ Pan head screw M4 x 8
213	⊕ Pan head Sems screw with spring washer M3 x 8
214	⊕ Brazier head taptite screw B 3φ x 10
215	⊕ Brazier head taptite screw B (Bronze) 3φ x 18
216	⊕ Brazier head taptite screw B (Bronze) 3.5φ x 18
217	Hexagon head bolt M3 x 20
218	Hexagon socket headless set screw M4 x 6

Ref. No.	Description
219	⊕ Pan head tapping screw (class 2) with plain washer 3φ x 8
220	Hexagon nut M3
221	Hexagon nut M4
222	Plain washer 3φ x 8φ x 0.5t
223	Plain washer 3φ x 10φ x 1t
224	Plain washer 4.6φ x 10φ x 1t
225	Plain washer 4.7φ x 10φ x 0.3t
226	Spring washer 3φ
227	Spring washer 4φ
228	Fiber washer 4φ x 12φ x 1t
229	Toothed lock washer 3φ
230	Toothed lock washer 4φ
231	E type washer 2φ
232	E type washer 3φ
233	E type washer 4φ
234	Stop ring CSTW-3
235	Oval lug 3φ

ACCESSORY PARTS

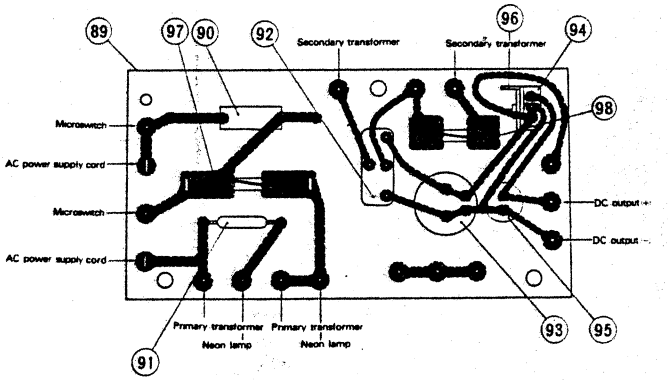


SERVO CONTROLLER CIRCUIT DIAGRAM

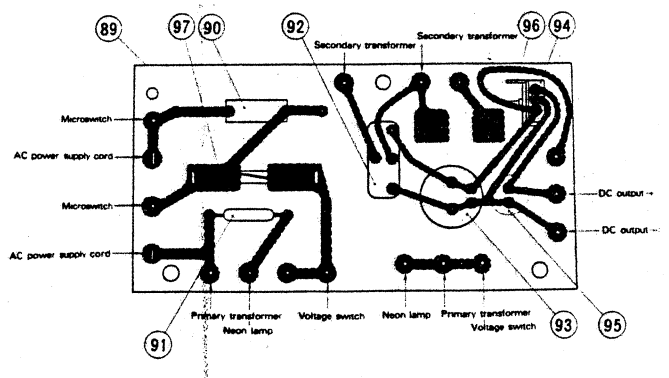


POWER SUPPLY PRINTED CIRCUIT BOARD

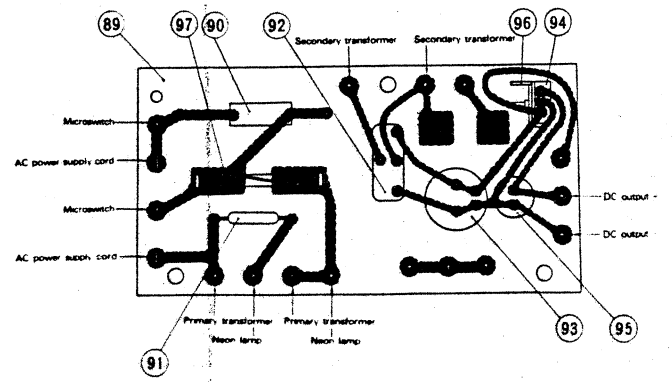
Model E-0



Model E-M



Model E-2 and E-3-3



EXPLODED VIEW